

Message Text

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TO ALL DIPLOMATIC AND CONSULAR POSTS PRIORITY

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BRUSSELS USEEC; VIENNA USIAEA INFORM CONSULS

E.O. 11652: N/A

TAGS: ENGR, MNUC, PARM

SUBJECT: CIVEX REPROCESSING

1. BELOW ARE A FEW COMMENTS AND A BRIEF DESCRIPTION OF THE CIVEX REPROCESSING TECHNIQUE THAT WAS ANNOUNCED ON FEB. 27 IN WASHINGTON BY CHAUNCEY STARR (ELECTRIC POWER RESEARCH INSTITUTE) AND WALTER MARSHALL (UK/HARWELL).

2. ALTHOUGH IT IS PREMATURE TO COMMENT ON THE MERITS OF CIVEX, THE USG APPRECIATES THE WORK AND EFFORT BY STARR AND MARSHALL TO DEVELOP THE CIVEX IDEA. WE ARE PRESENTLY STUDYING ITS SUBSTANTIVE MERITS.

3. WE ARE ENCOURAGED THAT THE AUTHORS OF CIVEX AND OTHERS
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ARE RESPONDING TO THE THRUST OF INFCE -- NAMELY TO SEARCH OUT ALTERNATE REPROCESSING AND BREEDER TECHNOLOGIES WHICH MINIMIZE THE PROLIFERATION RISKS OF NUCLEAR ENERGY. FOR EXAMPLE, WORKING GROUP 8 OF INFCE HAS RECEIVED THE TITLES OF 62 TECHNICAL PAPERS FROM 20 NATIONS FOR ITS NEXT MEETING. MANY OF THESE PAPERS WILL BE ON ONCE-THROUGH FUEL CYCLES.

4. THE AUTHORS OF CIVEX POINT OUT THAT PLUTONIUM IS IN PRINCIPLE MORE VALUABLE IN FAST REACTORS THAN IN THERMAL LWR REACTORS. CIVEX IS NOT INTENDED TO PRODUCE PLUTONIUM FOR USE IN RECYCLE IN LWRS. THESE POINTS ARE CONSISTENT WITH OUR VIEWS REGARDING NUCLEAR TECHNOLOGY. WE ARE ALSO STUDYING THE ECONOMICS OF ALTERNATIVE BREEDER FUEL CYCLES AND CONSEQUENTLY IT IS PREMATURE FOR US TO GIVE ANY CONCLUSION ON CIVEX ITSELF OR TO DISCUSS DETAILS OF COMMERCIALIZED PLUTONIUM BREEDER ECONOMIES WHICH USE CIVEX.

5. CIVEX IS AN AQUEOUS REPROCESSING TECHNIQUE WHICH IS DESIGNED TO HAVE THE FOLLOWING CHARACTERISTICS:

(A) SOME FISSION FRAGMENTS ARE LEFT IN.

(B) DESIGNED ONLY FOR THE USE OF BREEDER SPENT FUEL AND NOT FOR SPENT LWR FUEL.

(C) THE PLANT IS DESIGNED SO THAT EXTERNAL EQUIPMENT MUST BE BROUGHT IN IN ORDER TO MODIFY THE PLANT FOR MORE WEAPONS USABLE PLUTONIUM. CIVEX IS DESIGNED FOR 25 PERCENT P02 AND 75 PERCENT U02. VANCE

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Message Attributes

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